



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/496,069	02/01/2000	Ken Yoshimura	1924.63567	5672
7590	04/30/2004		EXAMINER	
Patrick G. Burns Esquire			TANG; KENNETH	
Greer Burns & Crain Ltd				PAPER NUMBER
300 S WACKER DRIVE-SUITE 2500			2127	
Chicago, IL 60606			DATE MAILED: 04/30/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/496,069	YOSHIMURA ET AL.
	Examiner Kenneth Tang	Art Unit 2127

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 17 February 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-8 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)               |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____ .  |

## **DETAILED ACTION**

1. This Non-final action is in response to Amendment C, filed on 2/17/04.
2. Claims 1-8 are presented for examination.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - a. In claims 1, 7, and 8, it is not made explicitly clear what is meant by “a queue for the system resources” (page 2: lines 4, page 5: 1-2, and 17-18, respectively). For example the acquisition unit is acquiring information only. How can a queue be part of it? It is not made specifically clear what type of information of the system resources is stored in the queue?
  - b. In claims 1, 7, and 8, it is not made explicitly clear whether “the queue” refers to “a queue for the system resources” in page 2: lines 4, page 5: 1-2, and 17-18, respectively, respectively.
  - c. In claims 1, 7, and 8, it is also not understood how it is possible for a queue to be stored in memory (page 2: line 5, page 5: lines 3 and 19) because it is only possible for the data contents in the queue to be stored in memory.

d. In claims 1, 7, and 8, the term “queue length” in page 2: lines 10 and 13, page 5: lines 6-9, and page 6: lines 2-5 are indefinite because it is not made specifically clear whether the length refers to the length of time or the length as in the number of contents in the queue.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**4. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berry (US 5,668,944) in view of Applicant's Admitted Prior Art.**

5. As to claim 1, Barry teaches a system diagnosis apparatus that diagnoses system resources of a computer system (*see Abstract and col. 1, lines 60-67*), comprising:

- an acquisition unit which acquires information on a utility rate of the system resources (col. 1, lines 39-41, col. 2, lines 1-4 and col. 14, lines 18-21 and lines 26-28);
- a memory unit that stores thresholds of the utility rate and the queue, wherein the thresholds represent the limits at which the system resources perform desired performances (col. 2, lines 4-11);

Art Unit: 2127

- a diagnosis unit that diagnoses the performance of the system resource (*col. 3, lines 30-35 and col. 16, lines 58-65*).

Berry fails to explicitly teach a queue for the system resources. However, Applicant's Admitted Prior art teaches using queues for the system resources (page 3, lines 12-13) and it is also well known in the art that queues can be used with system resources because it is a standard data structure. Berry does teach comparing thresholds in order to determine the performance based on utility rate (*col. 14, lines 19-41 and col. 15, lines 42-64*) but fails to explicitly state that the diagnosis of the performance of the system consists of:

- system resource has lowered when the utility rate is higher than the threshold of the utility rate and the queue length is shorter than the threshold of the queue length, or diagnoses that the number of the system resources is insufficient when the utility rate is higher than the threshold of the utility rate and the queue length is longer than the threshold of the queue length.

However, Applicant's Admitted Prior Art discloses that the conditions that lower the performance of the CPU, for example, include high utility rate and long queue waiting for execution process, and the conditions that lower the disk performance include high utility rate, long queue waiting and long response time (*see Specification, page 2, lines 16-25 through page 3, lines 1-22*) and that thresholds are used and compared to in order to define the limits. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the feature where the system resource has lowered when the utility rate is higher than the threshold of the utility rate and the queue length is shorter than the threshold of the queue length, or diagnoses that the number of the system resources is insufficient when the utility rate

is higher than the threshold of the utility rate and the queue length is longer than the threshold of the queue length to the existing method and system of Berry because Applicant's Admitted Prior Art states that if high utility rate is the only cause of poor performance, then it is effective to replace the existing CPU with a better CPU. But if high utility rate and response time are the only causes, then it is effective to replace the existing disk with a better disk (*see Specification, page 3, lines 13-22*).

6. As to claim 2, Berry teaches:

- a system resource determining unit which determines a system resource capable of giving the desired performance when it is diagnosed by the diagnosis unit that the performance of the system resource has lowered, or determines a number of the system resources capable of giving the desired performance when it is diagnosed by the system diagnosis unit that the number of the system resources is insufficient (*col. 2, lines 59-65*);
- an ordering unit which orders the system resource determined by the system resource determining unit as the system resource for upgrading (*col. 2, lines 59-65*).

7. As to claim 3, Berry teaches:

- where the ordering unit transmits, utilizing a network, the ordering information on the system resources to a device installed at the supplier of the system resources (*col. 4, line 50, col. 2, lines 42-52*). The computer processor is a unit that makes the order.

8. As to claim 4, Berry inherently teaches:

- a notifying unit which notifies, utilizing a network, the result of diagnosis by said diagnosis unit to the user of the system (*col. 2, line 62 and col. 4, line 50*).

9. As to claim 5, it is rejected for the same reasons as stated in claim 1. In addition, it is inherent that a flag is used to represent a boolean variable (necessity or not of upgrade).

10. As to claim 6, it is rejected for the same reasons as stated in the rejection of claim 1. In addition, Chen discloses that the response time is monitored in the system (*col. 16, lines 41-42*).

11. As to claims 7 and 8, they are rejected for the same reasons as stated in the rejection of claim 1.

#### ***Response to Arguments***

12. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

Art Unit: 2127

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (703) 305-5334. The examiner can normally be reached on 8:30AM - 7:00PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kt  
4/21/04



MENG-AL T. AN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100